

REMARKS

The claims have been amended to more particularly point out and distinctly claim the subject matter Applicants regard as their invention. Claims 1, 5, 6, 9, 12, 16, 17, 24, 44, and 45 have been amended; support for these amendments can be found throughout the specification and claims as originally filed.

Claims 8 and 19 have been deleted without prejudice or disclaimer.

Claims 46-49 are new. Support for these new claims can be found throughout the specification and claims as originally filed.

Now pending in the application are claims 1-7, 9-18, 20-31, 33-35, 37, and 39-49. No new matter has been added.

The amendments to the claims are being made for the purpose of expediting prosecution and are made without prejudice or waiver. Applicants reserve the right to present the original or previously-pending claims in this or a continuing application.

Rejection under 35 USC 112, first paragraph

Claims 30, 31, 33-35, 37 and 39-43 have been rejected under 35 U.S.C. § 112, first paragraph, because, in the Examiner's view (as stated in the Office Action dated March 3, 2004), "the specification . . . does not reasonably provide enablement for all neurodegenerative diseases, psychiatric dysfunctions, dopamine dysfunctions, cocaine abuse and clinical dysfunctions." The Examiner has further stated that "[t]here is no teaching either in the specification or in the prior art that serotonin uptake and/or dopamine uptake inhibitors are efficacious in known animal models of every known neurodegenerative disease, psychiatric disease, dopamine dysfunctions, cocaine abuse and clinical dysfunctions."

Applicants respectfully disagree. One of ordinary skill in the art can readily determine which conditions can be treated according to the methods of the invention. For example, as the Examiner has correctly acknowledged, the compounds of the invention bind to monoamine transporters such as the dopamine transporter (DAT) and/or serotonin transporter (SERT), and one of ordinary skill in the art would know that conditions related to the DAT and/or SERT (including, e.g., dopamine dysfunctions) can be treated according to the present methods.

Moreover, Applicants point out that not all of the rejected claims recite the language to which the Examiner has objected. For example, claim 39 (and claim 40 which depends therefrom) is directed to a method of treating *dopamine related* dysfunction. As previously pointed out, the present compounds are inhibitors of the dopamine transporter and/or serotonin transporter, and Applicants respectfully contend that the method of claim 39 is amply enabled by the teachings of the present specification. Claim 41 is directed to a method for treating *cocaine abuse*. As described in the specification (e.g., at page 7, lines 10-13), cocaine recognition sites are localized on monoamine transporters, and, therefore, compounds which inhibit the DAT are useful for the treatment of cocaine abuse. Applicants respectfully contend that the method of claim 41 is amply enabled by the teachings of the present specification.

Rejections under 35 USC 112, second paragraph

Claims 25-28, 30, 31, and 42 have been rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite.

As to claims 25-28, the Examiner appears to contend that the language “inhibiting 5-hydroxytryptamine reuptake of a monoamine transporter” is unclear. Further, the Examiner apparently takes the position that “inhibiting serotonin uptake” and “inhibiting serotonin transporter” are the same thing.

Applicants respectfully disagree. Claim 25 provides a method for inhibiting 5-hydroxytryptamine reuptake by contacting the monoamine transporter with a monoamine transporter inhibitor compound of the present invention. Claim 26 is directed to preferred monoamine transporters which include the dopamine transporter, the serotonin transporter and the norepinephrine transporter. Claim 27 is directed to a method for inhibiting 5-hydroxytryptamine reuptake of a monoamine transporter in a mammal comprising administering to the mammal a 5-hydroxytryptamine reuptake. Claim 28 is directed to a method for inhibiting dopamine reuptake of a dopamine transporter in a mammal.

Applicants contend that the term “inhibiting 5-hydroxytryptamine reuptake of a monoamine transporter” in claims 25-28 is clear on its face and would be clear to one of ordinary skill in the art. None of the claims contains the exact language referenced by the Examiner: “inhibiting serotonin uptake” and “inhibiting serotonin transporter”; however, Applicants respectfully submit that the claims are clear and are not indefinite.

As to the Examiner’s statement that the “claim language does not suggest [that inhibition can be achieved *in vitro* or *in vivo*],” Applicants respectfully point out that while claims 25 and 26 are not limited to either *in vitro* or *in vivo* inhibition of 5-hydroxytryptamine reuptake of a monoamine transporter, claims 27 and 28 recite the administration of a compound to a mammal.

As to claims 30, 31 and 42, the Examiner states that “[a]ccording to applicants arguments, clinical dysfunction covers every possible known disease in the art.” Applicants respectfully disagree. In each of these claims, the method comprises administering an effective amount of a compound of the invention; therefore, the term “clinical dysfunction” must be understood to embrace only those conditions for which treatment with a compound or compounds of the invention is efficacious. Applicants respectfully urge that the claims are clear and are not indefinite.

Reconsideration and withdrawal of the rejections is proper and the same is requested.

Rejections under 35 USC 102

Claims 1-29, 41, 44, and 45 have been rejected under 35 USC § 102(a) as anticipated by Meltzer et al., *J. Med. Chem.* 2001, 44, 2619-1635. This rejection is traversed. The Meltzer et al. paper cited by the Examiner is the work of Applicants, published less than one year prior to the present application for patent, and accordingly cannot be cited against the present claims. If required, an appropriate Declaration by the Applicants will be supplied.

Reconsideration and withdrawal of this rejection is proper and the same is requested.

Claims 1-9, 12, 14-16, 18, 20, 22, 25-29, 41, 44 and 45 have been rejected under 35 U.S.C. § 102(b) as anticipated by Zhao, (*J. Med Chem.* 2000). This rejection does not apply to the amended claims.

The Zhao reference discloses certain tropane analogs having substitution at the C6 or C7 positions of the tropane ring system, but Zhao does not teach or suggest the compounds or methods of the presently-pending claims. For example, each compound disclosed by Zhao is substituted at the 2-position of the tropane ring system (if at all) with a carbomethoxy group (or a lactone) and/or have a C2-C3 double bond. However, Zhao does not teach or suggest the compounds or methods of the pending claims. Accordingly, reconsideration and withdrawal of the rejection is appropriate and the same is requested.

Claims 1-45 have been rejected under 35 U.S.C. 102(b) by Meltzer et al., WO 99/02526. This rejection does not apply to the amended claims. Meltzer WO 99/02526 does not teach or suggest the presently-claimed compounds or methods for using them.

Accordingly, reconsideration and withdrawal of the rejection is appropriate and the same is requested.

Claims 1-45 have been rejected under 35 U.S.C. 102(e) as being anticipated by Meltzer (US 6,353,105; "Meltzer '105"). This rejection does not apply to the amended claims. Meltzer '105 does not teach or suggest the presently-claimed subject matter. Accordingly, reconsideration and withdrawal of the rejection is appropriate and the same is requested.

Claims 1-45 have been rejected under 35 U.S.C. § 102(e) as anticipated by Meltzer (US 6,670,375; "Meltzer 375"). This rejection does not apply to the amended claims. Meltzer '375 does not teach or suggest the presently-claimed subject matter. Accordingly, reconsideration and withdrawal of the rejection is appropriate and the same is requested.

CONCLUSION

It is respectfully submitted that this application is in condition for allowance, an early consideration and notice of allowance are earnestly solicited.

It is not believed that any additional fees are due, however if additional fees are due please charge our Deposit Account No. 04-1105. The undersigned requests any extensions of time necessary to avoid abandonment of this application.

Respectfully submitted,



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